

AMENDMENTS TO THE DRAWINGS

The attached sheet(s) of drawings includes changes to FIG. 11.

Attachment: Replacement sheet

REMARKS

Applicants thank the Examiner for total consideration given the present application. Claims 1-12 are currently pending of which claims 1, 2, 7, and 8 are independent. Claims 1, 2, 4, 6, 7, 8, 10, and 12 have been amended through this Reply. Upon careful review, one would conclude that no new matter has been added to the application via this amendment. Applicants respectfully request reconsideration of the rejected claims in light of the amendment and remarks presented herein, and earnestly seek timely allowance of all pending claims.

INTERVIEW SUMMARY

Applicants thank the Examiner for conducting a telephone interview with the Applicants' representative on June 10, 2009. Applicants further thank the Examiner for providing helpful comments on suggested claim amendments.

ALLOWABLE SUBJECT MATTER

Applicants appreciate that claims 1-6 have been indicated as being in condition for allowance if the issues regarding the objections and rejections under 35 U.S.C. § 112 are resolved. Applicants further appreciate that claims 7-12 have been indicated as being in condition for allowance if the issues regarding the objections and rejections under 35 U.S.C. §§ 101 and 112 are resolved.

A. Drawings

The Drawings are objected to because of a minor discrepancy in FIG. 11. More specifically, the Examiner alleges that the line from latch 33b to summation node 36a should be deleted. Attached herewith is a copy of the corrected FIG. 11 in which the line from latch 33b to summation node 36a has been deleted. Accordingly, it is respectfully requested to withdraw this objection.

B. Claim Objections

Claims 1, 2, 7 and 8 are objected to for minor informalities. Although Applicants do not necessarily agree with the Examiner that further amendment is necessary to clarify the invention,

claims 1, 2, 7, and 8 have been amended as suggested by the Examiner in order to expedite prosecution.

C. Claim Rejections Under 35 U.S.C. 112

Claims 1, 2, 4, 6, 7, 8, 10, and 12 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Again, although Applicants do not necessarily agree with the Examiner that the above-noted claims are indefinite, these claims have been amended as suggested by the Examiner to expedite prosecution.

D. Claim Rejections Under 35 U.S.C. 101

Claims 7-12 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Particularly, the Examiner alleges that the claimed "process" must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. Further, the Examiner alleges that the claimed process do not produce a useful, concrete, and tangible result. This rejection is respectfully traversed.

Applicants point out that MPEP § 2107 sets forth guidelines for the examination of patent applications under the "Utility Requirement". Under MPEP 2107, an invention is "useful" when the utility is specific, substantial, and credible. A utility is specific, if it is particular to the subject matter claimed. A substantial utility is found if one skilled in the art can use the claimed invention in a manner which provides some immediate benefit to the public. A credible utility is found if a person of ordinary skill in the art would accept that the recited or disclosed invention is currently available for such use. See MPEP 2107.

Applicants respectfully submit that the claimed invention satisfies the three-pronged test of "utility requirement" mentioned above. The claimed invention is directed to a specific subject matter which includes a method for generating a pixel signal having a k-th spectral sensitivity characteristic at a pixel position of interest where there is a pixel signal having an h-th spectral

sensitivity characteristic in a group of pixel signals from pixels arrayed on a two-dimensional plane.

Such method clearly provides a substantial utility since it provides a "real world" use by providing a practical application such as addressing the conventional problems associated with imaging apparatus having image sensors with a Bayer array of red, green, and blue color filters.

One conventional problem is that interpolation cannot be carried out properly in a region where there is no positive correlation between color component values (a boundary between one color and another color, for example), including both cases of no correlation and cases of negative correlation, which leads to large interpolation errors. Another conventional problem is that when noise is added to the signals, since the correlation between the signals is calculated by a linear similarity, interpolation is carried out as if there were a correlation with the noise occurring in other color signals, so the effect of the noise is felt even in color signals that are not being interpolated. The claimed method overcomes the above-noted conventional problems by carrying out interpolation regardless of how the color component values vary in a neighborhood of the pixel to be interpolated. (*See page 2, first, second, and third full paragraphs of the Specification.*)

This utility is also credible since a person of ordinary skill in the art would accept that the recited or disclosed invention is currently available for such use. (*See page 1, second and third full paragraphs of the Specification.*)

Accordingly, it is respectfully submitted that the claimed invention satisfies the three-pronged test of utility requirement, and thus, the claimed invention is useful and provides a practical application.

Although Applicants do not necessarily agree with the Examiner that claims 7-12 are non-statutory, independent claims 7 and 8 have been amended to positively recite a "first comparison and selection means" in order to expedite prosecution. Thus, at least in view of this amendment it is respectfully submitted that the claimed "process" ties to another statutory category (such as a particular machine).

Accordingly, it is respectfully requested to withdraw this rejection.

CONCLUSION


In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ali M. Imam Reg. No. 58,755 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: August 11, 2009

Respectfully submitted,

By  # 58,755
D. Richard Anderson
Registration No.: 40,439
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicants